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TITLE: COLOR FILTER ARRAY

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INVENTOR-INFORMATION:

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ABSTRACT:

**PURPOSE:** To easily obtain the color filter array which has a high grade, is excellent in mass productivity and is large area by periodically changing the refractive index of a photosensitive resin film in a thickness direction and disposing interference filters in the form of mosaic or stripes.

**CONSTITUTION:** This color filter array is disposed with the many interference filters which consist of the film of a photosensitive resin film 3 and have the refractive index periodically changing in the thickness direction of the film and allow the transmission of the respective rays of the specific wavelength regions corresponding to the three primary colors (RGB) of light in the form of mosaic or stripes. The incident laser beams on a transparent photoresist 3 are reflected by the reflecting film and the two beams thereof generate standing waves. Two kinds of the layers varying in the

**refractive index**, therefore,  
exist eventually in the thickness direction and the optical  
thickness  
distribution thereof is controllable as desired by the  
wavelength, quantity and  
irradiation time of the incident light. This color filter  
arrays has the  
excellent grade, can **display** the good and bright color  
images, facilitates the  
formation to the larger **area** and has the excellent mass  
productivity. The  
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# PATENT ABSTRACTS OF JAPAN

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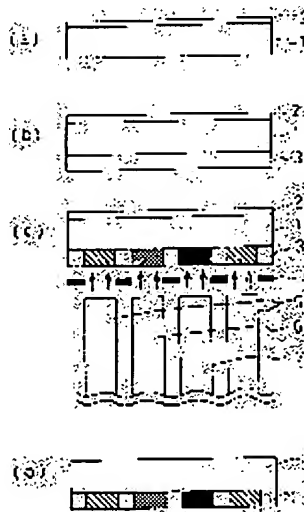
## (54) COLOR FILTER ARRAY

### (57)Abstract:

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